## Erratum: Next-to-Next-to-Leading Order Study of Three-Jet Production at the LHC [Phys. Rev. Lett. 127, 152001 (2021)]

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In this Letter, we evaluated the two-loop finite remainder function  $\mathcal{R}^{(2)lc}(s_{12})$  defined in Eq. (2) with an incorrect color factor. This oversight was due to a missing conversion factor between the conventions for the color generator  $T^a_{ij}$  used by the authors of Ref. [1] (see [2], section 2 before equation 2.3) and our convention (see Ref. [3], appendix A). By convention, the generators in Ref. [1] are normalized such that  $\operatorname{Tr} T^a T^b = \delta^{ab}$ . In our convention we use  $\operatorname{Tr} T^a T^b = \frac{1}{2} \delta^{ab}$ , which implies a factor of  $\sqrt{2}$  per appearing color generator  $T^a_{ij}$ . Table I lists the color factors and the conversion coefficient for the square of a color factor as it appears in the squared matrix element for each partonic channel: These conversion factors should have been included in our original calculation, and we include them now in this erratum. These factors are sizable and have implications on the phenomenology. In Fig. 1, we provide the corrected plots of the Letter. The NNLO prediction increases flatly by about  $\approx 10\%$ . This implies that the double virtual contribution is about  $\approx 10\%$  of the total NNLO cross section in contrast to our previous findings of  $\approx 2\%$ . With this, the naive estimate for corrections from subleading color terms would correspond to 1% corrections of the NNLO QCD prediction.

TABLE I. Conversion coefficients for squared matrix elements.

Channel	Color factor $\mathcal{C}$	$( \mathcal{C} ^2)_{our}/( \mathcal{C} ^2)_{Ref.[1]}$	
$\begin{array}{l} 0 \rightarrow ggggg\\ 0 \rightarrow gggq\bar{q}\\ 0 \rightarrow gQ\bar{Q}q\bar{q} \end{array}$	${{\operatorname{Tr}} T^a T^b T^c T^d T^e \over (T^a T^b T^c)_{ij} \over (T^a)_{ij} \delta_{kl}}$	64 8 2	

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FIG. 1. Updated plots including the correct normalization for  $\mathcal{R}^{(2)lc}(s_{12})$ .

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